

qfn

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/991,371	DELIWALA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jennifer Doan	2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/22/2004.
2. ☒ The allowed claim(s) is/are 1-7,9-28,32,33,37-45 and 48-65.
3. ☒ The drawings filed on 30 July 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

  
**PHAN T. H. PALMER**  
**PRIMARY EXAMINER**  
 12/13/2004

## **EXAMINER'S AMENDMENT AND STATEMENT OF REASONS FOR ALLOWANCE**

### ***Response to Amendment***

1. The present Office action is made in response to the amendment of 11/22/2004. It is noted that in the mentioned amendment, applicant has made amendments to claims 1, 5, 17, 40-44, 53 and 56 and canceled claims 46-47.

### ***Election/Restrictions***

2. Claim 1 is generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 8, 29-31 and 34-36, directed to the species to the use of an evanescent coupling region having a substantially constant thickness gap portion of Species (II) have been no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. See NOTE below.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

NOTE: The mentioned claims 8, 29-31 and 34-36 directed to the non-elected species were canceled by the applicant as indicated in the amendment of July 20, 2004. In order to rejoin the claims, applicant should add a new set of claims which are identical to the claims canceled in the mentioned amendment so that the newly-added claims are rejoined into the present application. See the Examiner's amendment below.

***Examiner's amendment***

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Wendy Koba on December 13, 2004.

The application has been amended as follows:

Please add the newly added claims 59-65:

59. The anisotropically etched waveguide prism assembly of claim 5, wherein the evanescent coupling region includes a substantially constant thickness gap portion.

60. The anisotropically etched waveguide prism assembly of claim 59, wherein the input/output light coupler includes a waveguide prism.

61. The anisotropically etched waveguide prism assembly of claim 60, wherein the at least one optical device includes a waveguide, the input/output light coupler includes a base, and the base is positioned to be substantially parallel to an axis of the waveguide.

62. The anisotropically etched waveguide prism assembly of claim 61, wherein the hybrid circuit includes an on-chip electronics portion positioned at a height that is substantially the same as a height of the base.

63. The anisotropically etched waveguide prism assembly of claim 59, wherein the input/output light coupler includes a waveguide grating.

64. The anisotropically etched waveguide prism assembly of claim 63, wherein the at least one optical device includes a waveguide, the input/output light coupler includes a base, and the base is positioned to be substantially parallel to an axis of the waveguide.

65. The anisotropically etched waveguide prism assembly of claim 64, wherein the hybrid circuit includes an on-chip electronics portion positioned at a height that is substantially the same as a height of the base.

#### ***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance:

None of the references discloses alone or in combination a method and an apparatus of a light coupling assembly comprising a device portion including a plurality of optical devices arranged in a first fixed pattern within at least a portion of a silicon

surface layer of a silicon-on-insulator (SOI) structure; a silicon-based passive light coupling portion including a plurality of anisotropically etched coupling elements, in combination with the remaining claimed limitations.

The examiner agrees with applicants' arguments on pages 9 and 10 in the remarks accompanying the amendment of November 22, 2004, and fully concurs that the Gurtler reference does not disclose or suggest the highlighted limitations above.

Claims 1-7, 9-28, 32, 33, 37-45 and 48-65 are therefore allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Doan

Patent Examiner

December 13, 2004



**PHAN T. H. PALMER  
PRIMARY EXAMINER**